CLAIMS:

1. An isolated nucleic acid sequence selected from the group consisting of:

(i) the nucleic acid sequence depicted in any one of SEQ ID NO: 1 to SEQ ID NO: 11;

(ii) nucleic acid sequences having at least 70% identity with the sequence of (i); and

(iii) fragments of (i) or (ii) of at least 20 b.p.

2. A nucleic acid sequence according to Claim 1(ii) wherein the nucleic acid sequences have at least 80% identity with the sequence of Claim 1(i).

3. A nucleic acid sequence according to Claim 2, wherein the nucleic acid sequences have at least 90% identity.

4. A nucleic acid sequence according to Claim 3, wherein the nucleic acid sequences have at least 95% identity.

5. An isolated nucleic acid sequence complementary to the nucleic acid sequence of Claim 1.

6. An amino acid sequence selected from the group consisting of:

(i) an amino acid sequence coded by the isolated nucleic acid sequence of Claim 1;

(ii) fragments of the amino acid squence of (i) having at least 10 amino acids;

(iii) analogues of the amino acid sequences of (i) or (ii) in which one or more amino acids has been added, deleted, replaced or chemically modified without substantially altering the biological activity of the parent amino acid sequence.

7. An amino acid sequence according to Claim 6, as depicted in any one of SEQ ID NO: 12 to SEQ ID NO: 22.

8. An isolated nucleic acid sequence coding for the amino acid sequence of Claim 6 or 7.

9. A purified antibody which binds specifically to the amino acid sequence of Claim 6 or 7.

10. An expression vector comprising the nucleic acid sequences of Claim 1 or 8 and control elements for the expression of the nucleic acid sequence in a suitable host.

11. An expression vector comprising the nucleic acid sequence of Claim 5, and control elements for the expression of the nucleic acid sequence in a suitable host.

12. A host cell transfected by the expression vector of Claim 10 or 11.

13. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as an active ingredient an agent selected from the group consisting of:

(i) the expression vector of Claim 10; and

(ii) the amino acid sequence of Claim 6 or 7.

14. A pharmaceutical composition according to Claim 13, for treatment of diseases which can be ameliorated, cured or prevented by raising the level of a Chordin-Like-Homolog (CLH).

15. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as an active ingredient an agent selected from the group consisting of:

(i) the nucleic acid sequence of Claim 5;

(ii) the expression vector of Claim 11; and

(iii) the purified antibody of Claim 9.

16. A pharmaceutical composition according to Claim 15, for treatment of diseases which can be ameliorated or cured by decreasing the level of the CLH product.

17. A pharmaceutical composition according to Claim 13 or 15, for the treatment of a disease selected from: diseases manifested in non-normal bone formation and non-normal bone modeling; bone injuries; diseases involved with the female reproductive tract; diseases of disorders involved with abnormal sexual differentiation; recurrent miscarriages, tumors of the uterus, breast or prostate; diseases involving sexual hormone abnormalities; cardiovascular disorders;

neuronal diseases of the CNS; neurode-generative diseases and diseases involving non-normal developments of neurons.

18. A method for detecting an CLH nucleic acid sequence in a biological sample, comprising the steps of:

(a) hybridizing to nucleic acid material of said biological sample a nucleic acid sequence of Claim 1 or 5; and

(b) detecting said hybridization complex;

wherein the presence of said hybridization complex correlates with the presence of an CLH nucleic acid sequence in the said biological sample.

19. A method according to Claim 18, wherein the nucleic acid material of said biological sample are mRNA transcripts.

20. A method according to Claim 18, where the nucleic acid sequence is present in a nucleic acid chip.

21. A method for identifying candidate compounds capable of binding to the CLH product and modulating its activity the method comprising:

(i) providing a protein or polypeptide comprising an amino acid sequence substantially as depicted in any one of SEQ ID NO: 12 to SEQ ID NO: 22, or a fragment of such a sequence;

(ii) comparing the physiological effect of the CLH product in the absence and presence of said candidate compound and selecting those compounds which show a significant effect on said physiological activity.

22. A method according to Claim 21, wherein the compound is an activator and the measured effect is increase in the physiological activity.

23. A method according to Claim 21, wherein the compound is an deactivator and the effect is decrease in the physiological activity.

24. An activator of the amino acid sequence of Claim 6 or 7.

25. An deactivator of the amino acid sequence of Claims 6 or 7.

26. A method for detecting CLH-product in a biological sample, comprising the steps of:

(a) contacting with said biological sample the antibody of Claim 9, thereby forming an antibody-antigen complex; and

(b) detecting said antibody-antigen complex

wherein the presence of said antibody-antigen complex correlates with the presence of CLH product in said biological sample.

27. A method for detecting anti-CLH antibodies in a biological sample comprising the steps of:

(a) contacting with said biological sample the antibody of Claim 6 or 7, thereby forming an antibody-antigen complex; and

(b) detecting said antibody-antigen complex

wherein the presence of said antibody-antigen complex correlates with the presence of anti-CLH antibody in said biological sample.